



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0577; Directorate Identifier 2013-SW-042-AD;

Amendment 39-18184; AD 2015-12-09]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters Deutschland GmbH (Previously Eurocopter Deutschland GmbH) (Airbus Helicopters)

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for Airbus Helicopters Model EC135P1, EC135T1, EC135P2, EC135T2, EC135P2+, EC135T2+, and MBB-BK 117 C-2 helicopters. This AD requires inspecting certain washers for movement and making appropriate repairs if the washers move. This AD was prompted by play found between the Smart Electro Mechanical Actuator (SEMA) and the control rod during installation work on a helicopter. The actions of this AD are intended to prevent loss of concerned control axis and subsequent loss of control of the helicopter.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain documents listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this AD, contact Airbus Helicopters, Inc., 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.airbushelicopters.com/techpub>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the European Aviation Safety Agency (EASA) AD, any incorporated-by-reference service information, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations Office, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Matt Wilbanks, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email matt.wilbanks@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

On August 18, 2014, at 79 FR 48707, the Federal Register published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 by adding an AD that would apply to Airbus Helicopters Model EC135P1, EC135T1, EC135P2, EC135T2, EC135P2+, EC135T2+, and MBB-BK 117 C-2 helicopters. The NPRM proposed to require inspecting certain washers for movement in the attachment hardware that connects the SEMA and the control rod of the longitudinal, lateral, and yaw actuators. If a washer can be moved, the NPRM proposed replacing the four screws, installing two additional washers, and torque-tightening the screws. The proposed requirements were intended to prevent loss of concerned control axis and subsequent loss of control of the helicopter.

The NPRM was prompted by AD No. 2013-0176, dated August 7, 2013, issued by EASA, which is the Technical Agent for the Member States of the European Union, to correct an unsafe condition for Eurocopter Deutschland GmbH Model EC 135 P1 (CDS), EC 135 P1 (CPDS), EC 135 P2+, EC 135 P2 (CPDS), EC 135 T1 (CDS), EC 135 T1 (CPDS), EC 135 T2+, EC 135 T2 (CPDS), EC 635 P2+, EC 635 T1 (CPDS), EC 635 T2+, and MBB-BK 117 C-2 helicopters. EASA advises that during installation work on a helicopter, it was discovered that it was not possible to install attachment hardware on a threaded blind borehole between the SEMA and the control rod without play. EASA advises that this condition, if not detected and corrected, could lead to loss of the concerned control axis, possibly resulting in loss of helicopter control. For these reasons, EASA AD No. 2013-0176 requires a one-time inspection of the affected SEMA attachment hardware to detect improper connection and play and, depending on the

findings, replacement of the affected hardware. After the issuance of EASA AD No. 2013-0176, Eurocopter Deutschland GmbH changed its name to Airbus Helicopters Deutschland GmbH.

Comments

After our NPRM (79 FR 48707, August 18, 2014) was published, we received comments from one commenter.

Request

Air Methods stated that the proposed AD requires compliance with Revision 1 of the service information and requested that previous compliance with the original service information, Revision 0, be included as an acceptable method of compliance in the AD.

We agree. We have added a paragraph to the AD giving credit for previous compliance with Revision 0 of the service information.

FAA's Determination

These helicopters have been approved by the aviation authority of Germany and are approved for operation in the United States. Pursuant to our bilateral agreement with Germany, EASA, its technical representative, has notified us of the unsafe condition described in the EASA AD. We are issuing this AD because we evaluated all information provided by EASA, reviewed the relevant information, considered the comment received, and determined the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed.

Differences Between this AD and the EASA AD

The EASA AD applies to Eurocopter Model EC635P2+, EC635T1 and EC635T2+ helicopters. This AD does not apply to these model helicopters because they have no FAA type certificate.

Related Service Information under 1 CFR part 51

Eurocopter reported in Alert Service Bulletins (ASBs) EC135-22A-015, Revision 1, dated January 28, 2013, and MBB BK117 C-2-22A-009, Revision 1, dated August 3, 2009, that it was discovered during the installation work on a helicopter that it was not possible to establish attachment hardware on a threaded blind borehole between the SEMA and the control rod without play. The ASBs state that “unfavourable adding of the tolerances” of the individual attachment hardware elements caused the screw to push against the bottom of the threaded blind borehole on the SEMA, preventing any clamping force on the screw head. The ASBs call for inspecting the SEMA attachment hardware connected to their respective control rods for play and making the proper adjustments to eliminate any play.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this AD.

Costs of Compliance

We estimate that this AD affects 385 helicopters of U.S. Registry and that labor costs average \$85 per work hour. Based on these estimates, we expect the following costs:

- Inspecting for movement of the washers requires 1.5 work hours for a labor cost of \$128 per helicopter and \$49,280 for the U.S. fleet.
- Replacing the screws and related work requires an additional 0.5 work-hours for a labor cost of \$43. Screws cost \$4 each while washers cost \$10 each. We estimate the cost at \$79 per repair.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on helicopters identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866;
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2015-12-09 Airbus Helicopters Deutschland GmbH (Previously Eurocopter

Deutschland GmbH) (Airbus Helicopters): Amendment 39-18184; Docket No. FAA-2014-0577; Directorate Identifier 2013-SW-042-AD.

(a) Applicability

This AD applies to Airbus Helicopters Model EC135P1, EC135T1, EC135P2, EC135T2, EC135P2+, EC135T2+, and MBB-BK 117 C-2 helicopters, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as loose attachment hardware between the Smart Electro Mechanical Actuator (SEMA) and a control rod. This condition could result in loss of the control axis and subsequent loss of control of the helicopter.

(c) Effective Date

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(e) Required Actions

(1) Within 50 hours time in service (TIS), for Model EC135P1, EC135T1, EC135P2, EC135T2, EC135P2+, and EC135T2+ helicopters, do the following:

(i) Using Figure 1 and Figure 2 of Eurocopter Alert Service Bulletin EC135-22A-015, Revision 1, dated January 28, 2013 (ASB EC135-22A-015) as reference, inspect the attachment hardware between the SEMA and the longitudinal actuator control rod to determine whether any of the washers can be moved.

(A) If no washer can be moved, no further action is needed.

(B) If a washer can be moved, replace the four screws and install two additional washers, part number (P/N) EN2139-05016, to connect the SEMA with the control rod. Torque-tighten each screw to 5-6 Nm.

(ii) Using Figure 1 and Figure 2 of ASB EC135-22A-015 as reference, inspect the attachment hardware between the SEMA and the lateral actuator control rod to determine whether any of the washers can be moved.

(A) If no washer can be moved, no further action is needed.

(B) If a washer can be moved, replace the four screws and install two additional washers, P/N EN2139-05016, to connect the SEMA with the control rod. Torque-tighten each screw to 5-6 Nm.

(iii) Using Figure 1, Figure 3, and Figure 4 of ASB EC135-22A-015 as reference, inspect the attachment hardware between the SEMA and the yaw actuator control rod to determine whether any of the washers can be moved.

(A) If no washer can be moved, no further action is needed.

(B) If a washer can be moved, replace the four screws and install two additional washers, P/N EN2139-05016, to connect the SEMA with the control rod. Torque-tighten each screw to 5-6 Nm.

(2) Within 50 hours TIS, for Model MBB BK117 C-2 helicopters, using Figure 1 of Eurocopter Alert Service Bulletin MBB BK117 C-2-22A-009, Revision 1, dated August 3, 2009, as reference, inspect the attachment hardware between the Yaw-SEMA and the Yaw-SEMA control rod to determine whether any of the washers can be moved.

(i) If no washer can be moved, no further action is needed.

(ii) If a washer can be moved, replace the four screws and install two additional washers, P/N EN2139-05016, to connect the SEMA with the control rod. Torque-tighten each screw to 5-6 Nm and apply polyurethane lacquer onto the attachment hardware.

(f) Credit for Previous Actions

If you performed the actions in Eurocopter Alert Service Bulletin EC135-22A-015, Revision 0, dated May 13, 2018, or Eurocopter Alert Service Bulletin MBB BK117 C-2-22A-009, Revision 0, May 13, 2008, before the effective date of this AD, you met the requirements of this AD.

(g) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Matt Wilbanks, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email matt.wilbanks@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

(h) Additional Information

The subject of this AD is addressed in the European Aviation Safety Agency (EASA) AD No. 2013-0176, dated August 7, 2013. You may view the EASA AD on the Internet at <http://www.regulations.gov> in Docket No. FAA-2014-0577.

(i) Subject

Joint Aircraft Service Component (JASC) Code: 2213, Flight Controller.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Eurocopter Alert Service Bulletin EC135-22A-015, Revision 1, dated January 28, 2013.

(ii) Eurocopter Alert Service Bulletin MBB BK117 C-2-22A-009, Revision 1, dated August 3, 2009.

(3) For Airbus Helicopters service information identified in this AD, contact Airbus Helicopters, Inc., 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.airbushelicopters.com/techpub>.

(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Fort Worth, Texas, on June 9, 2015.

Lance T. Gant,

Acting Directorate Manager, Rotorcraft Directorate,
Aircraft Certification Service.

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